	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definitions	Errors
1	BRS	L1	105	clostridial adj neurotoxin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:42			0
2	BRS	L2	641	botulinum adj (toxin or neurotoxin)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:42			0
3	BRS	L3	14645	lectin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:42			0
4	BRS	L4	754	lectin same galactose or galactosyl or aceylgalactosamine)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:43			0
5	BRS	L5	2	(1 or 2) same 4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:52			0
6	BRS	L6	11	(1 or 2) same 3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:50			0
7	BRS	L7	3	(1 or 2) same 3 same (conjugate or covalent$2)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:51			0
8	BRS	L8	3558	erythrina or glycine adj max) or (arachis adj hypogaea) or (bandeirea adj simplicifolia)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:52			0
9	BRS	L9	146	3 same 8	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:52			0
10	BRS	L10	0	(1 or 2) same 9	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:53			0
11	BRS	L11	68	lectin same (arachis adj hypogaea)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:53			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Defin...	Errors
12	BRS	L12	0	(1 or 2) same 11	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:53			0
13	BRS	L13	12892	light adj chain	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:54			0
14	BRS	L14	230	translocation adj domain	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:54			0
15	BRS	L15	10	(light adj chain) same (translocation adj domain) same ((clostridial adj neurotoxin) or (botulinum adj (toxin or	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:54			0
16	BRS	L16	0	3 same 15	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:55			0
17	BRS	L17	437335	control$4 same (transmission or pain)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:57			0
18	BRS	L18	1	17 same (5 or 6)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:58			0
19	BRS	L19	63	duggan adj michael.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:58			0
20	BRS	L20	1	chaddock adj john.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:59			0
21	BRS	L21	1	(19 or 20) and 6	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/07/05 10:59			0

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FILE 'MEDLINE' ENTERED AT 11:03:45 ON 05 JUL 2003

FILE 'CAPLUS' ENTERED AT 11:03:45 ON 05 JUL 2003
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FILE 'SCISEARCH' ENTERED AT 11:03:45 ON 05 JUL 2003
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FILE 'AGRICOLA' ENTERED AT 11:03:45 ON 05 JUL 2003

=> s clostridial neurotoxin
L1         915 CLOSTRIDIAL NEUROTOXIN

=> s botulinum (w) (toxin or neurotoxin)
L2       21405 BOTULINUM (W) (TOXIN OR NEUROTOXIN)

=> s lectin
L3      150439 LECTIN

=> s l3 (p) (galactose or galactosyl or acetylgalactosamine)
L4       16021 L3 (P) (GALACTOSE OR GALACTOSYL OR ACETYLGALACTOSAMINE)

=> s (l1 or l2) (p) l4
L5           1 (L1 OR L2) (P) L4

=> d l5 1 ibib abs

L5   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:        1999:249106  CAPLUS
DOCUMENT NUMBER:         130:276767
TITLE:                   Conjugates of   ***galactose***  -binding
                           ***lectins***   and   ***clostridial***
                           ***neurotoxins***   as analgesics
INVENTOR(S):             Duggan, Michael John; Chaddock, John Andrew
PATENT ASSIGNEE(S):      The Speywood Laboratory Limited, UK; Microbiological
                         Research Authority
SOURCE:                  PCT Int. Appl., 50 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
     WO 9917806         A1   19990415      WO 1998-GB3001   19981007
         W:  AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
             KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
             MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
             TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2306350         AA   19990415      CA 1998-2306350  19981007
     AU 9893574         A1   19990427      AU 1998-93574    19981007
     AU 741456          B2   20011129
     ZA 9809138         A    19990527      ZA 1998-9138     19981007
     EP 996468          A1   20000503      EP 1998-946571   19981007
     EP 996468          B1   20030521
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     JP 2001518522      T2   20011016      JP 2000-514674   19981007
PRIORITY APPLN. INFO.:                    GB 1997-21189    A  19971008
                                          WO 1998-GB3001   W  19981007

AB   A class of novel agents that are able to modify nociceptive afferent
     function is provided.  The agents may inhibit the release of
```

neurotransmitters from discrete populations of neurons and thereby reduce or preferably prevent the transmission of afferent pain signals from peripheral to central pain fibers. They comprise a ***galactose*** -binding ***lectin*** linked to a deriv. of a ***clostridial*** ***neurotoxin*** . The deriv. of the ***clostridial*** ***neurotoxin*** comprises the L-chain, or a fragment thereof, which includes the active proteolytic enzyme domain of the light (L) chain, linked to a mol. or domain with membrane-translocating activity. The agents may be used in or as pharmaceuticals for the treatment of pain, particularly chronic pain.
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 11:03:17 ON 05 JUL 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 11:03:45 ON 05 JUL 2003
L1 915 S CLOSTRIDIAL NEUROTOXIN
L2 21405 S BOTULINUM (W) (TOXIN OR NEUROTOXIN)
L3 150439 S LECTIN
L4 16021 S L3 (P) (GALACTOSE OR GALACTOSYL OR ACETYLGALACTOSAMINE)
L5 1 S (L1 OR L2) (P) L4

=> s (l1 or l2) (p) lectin
L6 48 (L1 OR L2) (P) LECTIN

=> s l6 (p) (conjugate or covalent?)
L7 11 L6 (P) (CONJUGATE OR COVALENT?)

=> duplicate remove l7
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L7
L8 6 DUPLICATE REMOVE L7 (5 DUPLICATES REMOVED)

=> s l8 not l5
L9 5 L8 NOT L5

=> d l9 1-5 ibib abs

L9 ANSWER 1 OF 5 MEDLINE
ACCESSION NUMBER: 2002470902 MEDLINE
DOCUMENT NUMBER: 22218001 PubMed ID: 12105193
TITLE: Inhibition of release of neurotransmitters from rat dorsal root ganglia by a novel ***conjugate*** of a Clostridium ***botulinum*** ***toxin*** A endopeptidase fragment and Erythrina cristagalli ***lectin*** .
AUTHOR: Duggan Michael J; Quinn Conrad P; Chaddock John A; Purkiss John R; Alexander Frances C G; Doward Sarah; Fooks Sarah J; Friis Lorna M; Hall Yper H J; Kirby Elizabeth R; Leeds Nicola; Moulsdale Hilary J; Dickenson Anthony; Green G Mark; Rahman Wahida; Suzuki Rie; Shone Clifford C; Foster Keith A
CORPORATE SOURCE: Centre for Applied Microbiology and Research, Porton Down, Salisbury, Wiltshire SP4 0JG, United Kingdom.
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (2002 Sep 20) 277 (38) 34846-52.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200210
ENTRY DATE: Entered STN: 20020917
Last Updated on STN: 20030105
Entered Medline: 20021024
AB ***Clostridial*** ***neurotoxins*** potently and specifically inhibit neurotransmitter release in defined cell types. Here we report that a catalytically active derivative (termed LH(N)/A) of the type A neurotoxin from Clostridium botulinum has been coupled to a ***lectin*** obtained from Erythrina cristagalli to form a novel ***conjugate*** . This ***conjugate*** exhibits an in vitro selectivity for nociceptive afferents compared with the anatomically adjacent spinal neurons, as

assessed using in vitro primary neuronal culture systems to measure inhibition of release of neurotransmitters. Chemical ***conjugates*** prepared between E. cristagalli ***lectin*** and either naturally sourced LH(N)/A or recombinant LH(N)/A purified from Escherichia coli are assessed, and equivalence of the recombinant material are demonstrated. Furthermore, the dependence of inhibition of neurotransmitter release on the cleavage of SNAP-25 is demonstrated through the use of an endopeptidase-deficient LH(N)/A ***conjugate*** variant. The duration of action of inhibition of neurotransmitter released by the ***conjugate*** in vitro is assessed and is comparable with that observed with Clostridium ***botulinum*** ***neurotoxin*** . Finally, in vivo electrophysiology shows that these in vitro actions have biological relevance in that sensory transmission from nociceptive afferents through the spinal cord is significantly attenuated. These data demonstrate that the potent endopeptidase activity of ***clostridial*** ***neurotoxins*** can be selectively retargeted to cells of interest and that inhibition of release of neurotransmitters from a neuronal population of therapeutic relevance to the treatment of pain can be achieved.

L9 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:228744 CAPLUS
DOCUMENT NUMBER: 134:247267
TITLE: Clostridial neurotoxin targeted conjugates for inhibition of secretion from non-neuronal cells
INVENTOR(S): Foster, Keith Alan; Chaddock, John Andrew; Purkiss, John Robert; Quinn, Conrad Padraig
PATENT ASSIGNEE(S): Microbiological Research Authority, UK
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021213	A2	20010329	WO 2000-GB3669	20000925
WO 2001021213	A3	20020711		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1235594	A2	20020904	EP 2000-962721	20000925
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003509476	T2	20030311	JP 2001-524636	20000925

PRIORITY APPLN. INFO.: GB 1999-22554 A 19990923
WO 2000-GB3669 W 20000925

AB A method of treatment of disease by inhibition of cellular secretory processes is provided. The method has particular application in the treatment of diseases dependent on the exocytotic activity of endocrine cells, exocrine cells, inflammatory cells, cells of the immune system, cells of the cardiovascular system, and bone cells. Agents and compns. therefor, as well as methods for manufg. these agents and compns., are provided. In a preferred embodiment a clostridial neurotoxin, substantially devoid of holotoxin binding affinity for neuronal cells of the presynaptic muscular junction, is assocd. with a targeting moiety. The targeting moiety is selected such that the clostridial toxin conjugate so formed may be directed to a non-neuronal target cell to which the conjugate may bind. Following binding, a neurotoxin component of the conjugate, which is capable of inhibition of cellular secretion, passes into the cytosol of the target cell by cellular internalization mechanisms. Thereafter, inhibition of secretion from the target cell is effected.

L9 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:706999 CAPLUS
DOCUMENT NUMBER: 133:261538
TITLE: Use of a lectin or lectin conjugate for modulation of C-fiber activity, and therapeutic use thereof
INVENTOR(S): Foster, Keith Alan; Chaddock, John Andrew; Quinn, Conrad Padraig

PATENT ASSIGNEE(S): Microbiological Research Authority, UK
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000057897	A1	20001005	WO 2000-GB1247	20000331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1165114	A1	20020102	EP 2000-914295	20000331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: GB 1999-7429 A 19990331
WO 2000-GB1247 W 20000331

AB The invention relates to the treatment of pain and to compds. that modulate C-fiber activity. In particular, the invention relates to the use of a ***lectin*** in the manuf. of a medicament for modulation of C-fiber neuron activity, and to ***lectin*** ***conjugates*** . The ***lectin*** ***conjugates*** comprise a ***lectin*** coupled to a peptide or protein, wherein the peptide or protein is substantially free of ***clostridial*** ***neurotoxin*** enzyme activity. The invention also concerns methods for manufg. the ***conjugates*** . The compds. and compns. described have particular application in the treatment of diseases of which C-fiber activity is a component. Such diseases include pain, inflammation, psoriasis and other C-fiber related conditions.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:144760 CAPLUS
DOCUMENT NUMBER: 132:175838
TITLE: Compounds inhibiting exocytosis in mucus-secreting cells or neurotransmitter release from neurons that control or direct mucus secretion for treatment of mucus hypersecretion
INVENTOR(S): Quinn, Conrad Padraig; Foster, Keith Alan; Chaddock, John Andrew
PATENT ASSIGNEE(S): Microbiological Research Authority, UK
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010598	A2	20000302	WO 1999-GB2806	19990825
WO 2000010598	A3	20000615		
W: AU, CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2341429	AA	20000302	CA 1999-2341429	19990825
AU 9955250	A1	20000314	AU 1999-55250	19990825
AU 756063	B2	20030102		
EP 1107794	A2	20010620	EP 1999-941754	19990825
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002523377	T2	20020730	JP 2000-565918	19990825

PRIORITY APPLN. INFO.: GB 1998-18548 A 19980825
WO 1999-GB2806 W 19990825

AB A method of treating mucus hypersecretion, the causative factor in chronic obstructive pulmonary disease (COPD), asthma, and other clin. conditions involving COPD, comprises administering a compd. that inhibits exocytosis in mucus secreting cells or neurons that control or direct mucus

secretion. Also described is a compd., for use in the treatment of hypersecretion of mucus, which inhibits mucus secretion by inhibiting mucus secretion by mucus secreting cells, and/or inhibiting neurotransmitter release from neuronal cells controlling or directing mucus secretion.

L9 ANSWER 5 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:520037 BIOSIS
DOCUMENT NUMBER: PREV200200520037
TITLE: Characterisation of a novel ***conjugate*** of a ***botulinum*** ***neurotoxin*** A endopeptidase fragment and E. cristagalli ***lectin*** .
AUTHOR(S): Ling, R. J. (1); Fretwell, R.; Alexander, F.; Fooks, S.; Leeds, N.; Jameson, K.; Hall, Y.; Kirby, E.; Chaddock, J.; Shone, C.
CORPORATE SOURCE: (1) Centre for Applied Microbiology and Research, Porton Down, Salisbury, Wiltshire, SP4 0JG UK
SOURCE: Naunyn-Schmiedeberg's Archives of Pharmacology, (June, 2002) Vol. 365, No. Supplement 2, pp. R28. print.
Meeting Info.: International Conference on Basic and Therapeutic Aspects of Botulinum and Tetanus Toxins Hannover, Germany June 08-12, 2002
ISSN: 0028-1298.
DOCUMENT TYPE: Conference
LANGUAGE: English

=> d his

(FILE 'HOME' ENTERED AT 11:03:17 ON 05 JUL 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 11:03:45 ON 05 JUL 2003
L1 915 S CLOSTRIDIAL NEUROTOXIN
L2 21405 S BOTULINUM (W) (TOXIN OR NEUROTOXIN)
L3 150439 S LECTIN
L4 16021 S L3 (P) (GALACTOSE OR GALACTOSYL OR ACETYLGALACTOSAMINE)
L5 1 S (L1 OR L2) (P) L4
L6 48 S (L1 OR L2) (P) LECTIN
L7 11 S L6 (P) (CONJUGATE OR COVALENT?)
L8 6 DUPLICATE REMOVE L7 (5 DUPLICATES REMOVED)
L9 5 S L8 NOT L5

=> s erythrina or (glycine max) or (arachis hypogaea) or (bandeirea simplicifolia)
L10 82568 ERYTHRINA OR (GLYCINE MAX) OR (ARACHIS HYPOGAEA) OR (BANDEIREA SIMPLICIFOLIA)

=> s l10 (p) lectin
L11 3222 L10 (P) LECTIN

=> s light chain
L12 94505 LIGHT CHAIN

=> s translocation domain
L13 487 TRANSLOCATION DOMAIN

=> s l12 (p) l13 (p) (l1 or l2)
L14 4 L12 (P) L13 (P) (L1 OR L2)

=> s l14 (p) (l3 or l6 or l14)
L15 4 L14 (P) (L3 OR L6 OR L14)

=> duplicate remove l15
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L15
L16 1 DUPLICATE REMOVE L15 (3 DUPLICATES REMOVED)

=> s l16 not l5
L17 1 L16 NOT L5

=> d l17 1 ibib abs

L17 ANSWER 1 OF 1 MEDLINE
ACCESSION NUMBER: 1998035837 MEDLINE
DOCUMENT NUMBER: 98035837 PubMed ID: 9367816
TITLE: Recombinant expression and purification of the botulinum

neurotoxin type A translocation domain.
AUTHOR: Lacy D B; Ste[redacted] R C
CORPORATE SOURCE: Department of Chemistry, University of California, Berkeley, California 94720, USA.
SOURCE: PROTEIN EXPRESSION AND PURIFICATION, (1997 Nov) 11 (2) 195-200.
Journal code: 9101496. ISSN: 1046-5928.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ENTRY DATE: Entered STN: 19980116
Last Updated on STN: 19980116
Entered Medline: 19971224

AB ***Botulinum*** ***neurotoxin*** type A in its fully activated form exists as a dichain protein consisting of a 50-kDa ***light*** ***chain*** and a 100-kDa heavy chain linked by a disulfide bond (B. R. DasGupta and H. Sugiyama, Biochem. Biophys. Res. Commun. 48, 108-112, 1972). The protein can be further subdivided into three functional domains: a catalytic domain corresponding to the ***light*** ***chain*** , a ***translocation*** ***domain*** associated with the N-terminal half of the heavy chain, and a binding domain as the C-terminal half. To facilitate further structural and functional studies on the mechanism of toxin translocation, we report here the recombinant Escherichia coli expression and purification of the isolated ***translocation*** ***domain*** with a yield of 1 mg pure protein per 1 g cell paste. Circular dichroism, enzyme-linked immunosorbent assays, and preliminary crystallization experiments verify proper protein folding. This reagent should serve as a key tool in elucidating the mechanism of translocation and in determining how the catalytic domain, a large 50-kDa metalloprotease, is delivered to the cytosol.


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=> d his

     (FILE 'HOME' ENTERED AT 11:03:17 ON 05 JUL 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     11:03:45 ON 05 JUL 2003
L1          915 S CLOSTRIDIAL NEUROTOXIN
L2        21405 S BOTULINUM (W) (TOXIN OR NEUROTOXIN)
L3       150439 S LECTIN
L4        16021 S L3 (P) (GALACTOSE OR GALACTOSYL OR ACETYLGALACTOSAMINE)
L5            1 S (L1 OR L2) (P) L4
L6           48 S (L1 OR L2) (P) LECTIN
L7           11 S L6 (P) (CONJUGATE OR COVALENT?)
L8            6 DUPLICATE REMOVE L7 (5 DUPLICATES REMOVED)
L9            5 S L8 NOT L5
L10       82568 S ERYTHRINA OR (GLYCINE MAX) OR (ARACHIS HYPOGAEA) OR (BANDEIRE
L11        3222 S L10 (P) LECTIN
L12       94505 S LIGHT CHAIN
L13         487 S TRANSLOCATION DOMAIN
L14           4 S L12 (P) L13 (P) (L1 OR L2)
L15           4 S L14 (P) (L3 OR L6 OR L14)
L16           1 DUPLICATE REMOVE L15 (3 DUPLICATES REMOVED)
L17           1 S L16 NOT L5

=> s duggan michael/au
L18           3 DUGGAN MICHAEL/AU

=> s chaddock john/au
L19           0 CHADDOCK JOHN/AU

=> s chaddock j/au
L20           2 CHADDOCK J/AU

=> s (l18 or l20) and l3
L21           2 (L18 OR L20) AND L3

=> duplicate remove l21
DUPLICATE PREFERENCE IS 'BIOSIS, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L21
L22           1 DUPLICATE REMOVE L21 (1 DUPLICATE REMOVED)
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=> s l22 not l5
L23             1 L22 NOT L5

=> d l23 1 ibib abs

L23  ANSWER 1 OF 1  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER:   2002:520037  BIOSIS
DOCUMENT NUMBER:    PREV200200520037
TITLE:              Characterisation of a novel conjugate of a botulinum
                    neurotoxin A endopeptidase fragment and E. cristagalli
                      ***lectin***  .
AUTHOR(S):          Ling, R. J. (1); Fretwell, R.; Alexander, F.; Fooks, S.;
                    Leeds, N.; Jameson, K.; Hall, Y.; Kirby, E.;   ***Chaddock,***
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L1           915 S CLOSTRIDIAL NEUROTOXIN
L2         21405 S BOTULINUM (W) (TOXIN OR NEUROTOXIN)
L3        150439 S LECTIN
L4         16021 S L3 (P) (GALACTOSE OR GALACTOSYL OR ACETYLGALACTOSAMINE)
L5             1 S (L1 OR L2) (P) L4
L6            48 S (L1 OR L2) (P) LECTIN
L7            11 S L6 (P) (CONJUGATE OR COVALENT?)
L8             6 DUPLICATE REMOVE L7 (5 DUPLICATES REMOVED)
L9             5 S L8 NOT L5
L10        82568 S ERYTHRINA OR (GLYCINE MAX) OR (ARACHIS HYPOGAEA) OR (BANDEIRE
L11         3222 S L10 (P) LECTIN
L12        94505 S LIGHT CHAIN
L13          487 S TRANSLOCATION DOMAIN
L14            4 S L12 (P) L13 (P) (L1 OR L2)
L15            4 S L14 (P) (L3 OR L6 OR L14)
L16            1 DUPLICATE REMOVE L15 (3 DUPLICATES REMOVED)
L17            1 S L16 NOT L5
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L19            0 S CHADDOCK JOHN/AU
L20            2 S CHADDOCK J/AU
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